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- 1 here, in the risk assessment. Tell us why it is that the mean
2 is used.
- 3 A Well, the mean is used and has been used, as I said, for
4 the last 30 years as the predominate way to capture
5 concentration in a risk assessment and that is because over a
6 long period of time, and that is for long term exposures over a
7 long period of time, with the predominance of environmental
8 factors, they will cancel out. If a person is doing the same
9 activity repeatedly, always a receptor and the same location
10 repeatedly, the variables and the environmental data will
11 cancel out and the person will be exposed over a long period of
12 time to that mean value. So, that's why we've always used the
13 mean value for those kinds of analysis.
- 14 Q Let's take a case where we have a factory that's emitting
15 a certain material of interest and we want to know what kind of
16 concentration for that material exists right at the border of
17 the factory, right at the fence line. Could you give me an
18 example of a factor that would produce variability in the
19 results but would tend to cancel out over time?
- 20 A Wind.
- 21 Q I'm sorry?
- 22 A Wind.
- 23 Q Explain for us why it is that wind is one of those
24 variables.
- 25 A Well, wind patterns are definable variables and over time,

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1 if we have a monitor at a fence line and we have variable data
2 over a long enough period of time, all those variable in the
3 wind pattern, will be captured.

4 Q Okay.

5 A And, that is why long term monitoring for air, for
6 example, is encouraged over short term monitoring.

7 Q Okay. And if the wind pattern tends to predominate, that
8 is that overwhelmingly it's always in one direction, what
9 happens to that fact as time evolves? What happens --

10 THE COURT: I'm sorry, would you restate that?

11 Q If there's a predominating direction for the wind, how
12 does that emerge over the long term?

13 THE COURT: All right.

14 THE WITNESS: Well, the concentration data that are
15 collected will eventually come to a mean concentration that
16 will reflect the predominance of that wind pattern. But in
17 different times and different days, that's going to change.

18 Q I want you to look at 2272 and we can show it on the
19 screen and ask whether this would assist you in explaining what
20 you've just described regarding variability and a mean over the
21 long term. Would that help you describe that to the Court?

22 MR. MULLADY: Objection, foundation. Your Honor, I
23 think with this witness we haven't yet heard that she created
24 these slides and that they would assist her in her testimony.

25 MR. BERNICK: Well, I just asked her the latter and

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1 it's irrelevant whether she created the slides. You can cover
2 that on cross examination. The foundation is whether it would
3 assist the Court.

4 THE COURT: I think that is the foundation question.
5 Whether it would assist and that is the question he just posed
6 to the witness. So, I need an answer to that question before I
7 can rule on the -- before there is an objection. You may
8 answer.

9 THE WITNESS: All right. What we see here is --

10 MR. BERNICK: No, no, no.

11 THE COURT: Answer yes, or no. Whether it will
12 assist you.

13 Q Mr. Mullady is raising issues about the admissibility of
14 your testimony, so I want to just ask you, tell us whether this
15 demonstrative would assist you in explaining to the Court your
16 testimony regarding the mean?

17 A I believe it will.

18 MR. BERNICK: Okay. And could you -- Your Honor, may
19 I have the witness address the demonstrative 2272 for the
20 Court?

21 THE COURT: Yes.

22 MR. BERNICK: Thank you. Go ahead, Dr. Anderson.

23 THE WITNESS: Yes. I think what this helps us do is,
24 we see on the left hand side the exposure variability. If we
25 were thinking of that monitor at the fence line, we will see

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1 some days lower exposures, some days a higher exposure and in
2 the short term, we see guidance from EPA that says, you can't
3 really use those data to characterize long term. And if we're
4 dealing with short term risk assessments, we sometimes,
5 depending on the circumstance, use our professional judgment as
6 to whether we have to reflect that variation in short term
7 cases, whether it's acute or whether it's short term meaning
8 very few events over a long period of time.

9 But as we go across the bottom to the long term, what
10 we find is that those variable converge to the mean, that that
11 receptor, staying there long enough is the constant. So that
12 receptor will get over time that mean concentration.

13 Q I want to stop you right now and just focus on what you've
14 just said. This receptor, that is the person whose exposure
15 you're measuring, is a constant. Tell us what you mean when
16 you say that person as a receptor is a constant over the long
17 term.

18 A If that receptor is in a particular place, doing a
19 particular activity with respect to a product, or living in a
20 particular place with respect to a source, a factory, they
21 become a constant because they capture, they don't change what
22 they're doing, what changes around them that influences the
23 variability, the overwhelming variability are these
24 environmental factors that cancel out as the person stays there
25 a long time.

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1 Q What have you indicated -- first let me just ask you, in
2 order to satisfy Mr. Mullady, did you or did you not
3 participate in the creation of this slide?

4 A Yes, I did.

5 Q What about the word receptor? Was that your word or
6 somebody else's word?

7 A That's my word.

8 Q Okay. What about the word mean, was that your word or
9 somebody else's word?

10 A That is my word.

11 Q What about all the words on this slide, are they your
12 words or somebody else's words?

13 A Those are my words.

14 Q Okay. Now, what is indicated at the right hand side when
15 you talk about the use of the product, the composition of the
16 product and the proximity up to the product?

17 A Very specific to the evaluation in this case, we have the
18 use of the product, meaning the person who is spraying, or the
19 person who is mixing, or the bottom individuals and the
20 categories that are bystanders to other applications, we have
21 them at a proximity to the product application. These become
22 constant factors. The composition of the product is going to
23 also be a constant factor as we take the exposures from that as
24 the source, as if it were the factory.

25 Q That's fine. Now, on the basis of this, could you tell

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1 me, this analysis that you've gone through, do you have
2 experience and familiarity with what the -- well, let me take
3 -- let me strike that and go back. You've said that the EPA
4 has now been involved in risk assessment for more than 30
5 years?

6 A Starting in 1976.

7 Q Okay. And you've said that at the EPA you've participated
8 in literally hundreds of risk assessments?

9 A Yes, I did.

10 Q Okay. Tell us whether the EPA, whether you're familiar
11 with what the EPA has said by way of guidance on this very
12 subject?

13 A Well, the guidance on this subject comes from the logic
14 behind what I just discussed and the guidance consistently says
15 that the mean is the appropriate value to use when assessing
16 concentrations at the maximum exposed point under the Clean Air
17 Act. It says the mean is the appropriate concentration for
18 evaluating site wide data when an individual has potential to
19 be exposed to variable data over that site. The mean
20 concentration is used in EPA's pesticide programs for the same
21 reasons, for the application and use of pesticides. We see
22 this use of the mean based on the logic I just described. And
23 it's prevalent in EPA guidance.

24 Q Showing you 2217, are there particular documents that have
25 reflected the EPA's guidance?

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1 A Yes, there are. I think this is just one of many
2 excerpts. Here we see from the 1992 risk assessment guidance
3 for superfund sites, the average concentration is most
4 representative of the concentration that would be contacted at
5 a site over time. On the right hand column we see that in the
6 EPA 1986 risk assessment, that the average concentrations were
7 used from the epidemiology studies in order to construct what
8 is still used, this is the document I spoke of earlier, what is
9 still used by EPA as the dose response characterization for
10 asbestos.

11 Q Thank you. Showing you 2274, could you explain how this
12 bears upon the same subject?

13 A Yes. There has been -- this is a directive from the
14 deputy administrator of EPA that was issued in 1992, warning
15 against the overuse of maximums and suggesting that leaving
16 values at their mean is more appropriate. Because if we
17 maximize everything we vastly -- we create a community of
18 numbers that have no relevance to the populations and that's
19 essentially what this is saying.

20 Q I'll take you back to 2272 for a moment, if we could do
21 that, TJ. What if you had a -- I believe what you've done here
22 is a risk assessment that is -- or reconstructing as the risk
23 assessment relating to long term exposures?

24 A Yes.

25 Q What if you had a totally different mission in this case,

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1 what if your mission in this case was not to talk about risk
2 over the long term, but to talk about risk for somebody who had
3 only very sporadic exposure to the product. Would you follow
4 the same approach?

5 A No, if they're over or under these either short-term
6 exposures or a few short-term events, I would probably express
7 both an average concentration and a maximum concentration,
8 because they're still on this left-hand part of the curve.
9 They have not had time enough to converge to the exposure of
10 the mean concentration.

11 Q I'm showing you 2273. Does this relate to the same
12 subject?

13 A Yes.

14 Q And could you just give a short explanation of how 2273
15 bears upon your testimony in this case?

16 A Well, it's a demonstration of what we've been discussing.
17 In this particular case we're not talking about the short-term
18 exposures on the left. The concentration and duration factors
19 have been set to very long-term maximums, so the risk
20 assessment is dealing with -- the risk assessment exposure work
21 is dealing with chronic exposure, and the only appropriate
22 metric is the average concentration.

23 Q Why is it that you focused on long-term exposure? That is
24 to say -- we're going to talk about what you've done with
25 duration and cumulative exposure. Why is it that you keep on

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1 focusing on the long-term? What is that -- what, if any,
2 relationship does that have to the kind of dose that you're
3 calculating?

4 A In this -- this particular case I thought it important to
5 set up a maximum screen. Not to try to come to realistic
6 factors, but that's essentially the first question. If we
7 assume maximums -- that is not just EPA's Exposure Factors
8 Handbook maximum -- recommended maximum of 25 years for an
9 occupation but 45. If we assume constant exposure over a full
10 day, every day, eight hours a day for that 45 occupational
11 lifetime, we're talking about 11,250 days or 90,000 hours of
12 exposure. So we are clearly as far out on the long-term
13 exposure curve as we can get with any reasonable --
14 unreasonable, actually, assignment of occupational exposures.

15 Q Go back to 2272 for a moment. If we now assume that the
16 long-term is 45 years, is there any sense from your point of
17 view in assuming that for 45 years a person was constantly -- a
18 constant person at the site was constantly exposed to the
19 maximal wind pattern, maximal exposure circumstance that might
20 exist from time to time. Is there any merit to that kind of
21 approach?

22 A I think it's inconceivable that that person could be at
23 the wrong place at the wrong time all of the time for 45 years.

24 Q So let's take, for example, wind. If the wind is in the
25 direction such that say from the spray -- the spray is always

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1 in -- is in your face, would that be on a given day?

2 A Yes.

3 Q Would that be the high concentration or the low
4 concentration?

5 A That would be the high concentration.

6 Q Is there any sense in assuming that wherever that person
7 is for 45 years the wind is kind of following them around, so
8 it's always in their face?

9 A No.

10 Q Let's show 2275 to get to the point at which you enter
11 into this process. We Dr. Lees, who has the product
12 descriptions, the definitions, and gives you the mean
13 concentrations. What is it that you decided to do with the
14 mean concentrations?

15 A Yes, for each of the nature of exposure categories defined
16 on the left-hand side that we discussed earlier, I selected the
17 highest mean value from Dr. Lees' analysis to assign to each of
18 those categories for each product type.

19 Q Thank you. And do we now -- are we now in the position --
20 we're taking off the magnet boards. We see a summary of what
21 was done when it comes to concentration. That is that we had
22 Categories A through E that Dr. Lee defined them, that Dr. Lee
23 gave you the mean concentration, and then again what is it that
24 you did with the mean concentrations? Which one did you use to
25 choose -- did you choose to use?

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1 A I chose to use the highest, because he presented two means
2 of evaluating his data. I chose the highest from whichever the
3 data set was.

4 Q Thank you. Let's talk about frequency and duration.
5 Could you just describe in general terms what now -- how now
6 the risk assessment proceeds, what the next steps are in
7 general terms, and then we'll focus on how you implemented
8 those stages?

9 A Yes, to get to the cumulative exposure assessment I needed
10 to take his maximum concentrations and then ask the question
11 how much frequency of exposure would an individual in these
12 categories get and over what time period. So those were the
13 next two steps in my analysis.

14 Q Okay. Could you just describe in your own words -- well,
15 let me just put it this way. Tell us whether there was a
16 specific analysis that was done in order to provide the factual
17 predicate for your calculations.

18 A Well, I did several levels of analysis. Initially, I
19 thought it would be very important to really characterize how
20 often a Grace product might be in a building that a person
21 would contact or how often events might occur, or, in fact, how
22 many buildings actually have these kinds of products. And for
23 the bi-standard categories, the D's and E's, how often would
24 they -- if they are visiting a site, how often are they likely
25 to overlap with an exposure circumstance at a site, and I did

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1 those analyses, and they're reported in my report.

2 But, eventually, I decided that the most important
3 thing in this analysis is to make this a very conservative
4 screening analysis. Meaning if I set all the parameters very
5 high, I could be very certain that there would be a low
6 probability that anybody would be exposed to anything any high
7 than those values. So I have chosen in the screening analysis
8 that I have really used this final set of assumptions.

9 Q Let's focus, first of all, on exposures to different kinds
10 of products. I'm going to show you 2276 and ask you whether
11 this accurately summarizes the work that people working for you
12 did in order to analyze what products were available to the
13 marketplace over time. That is what Grace products were
14 available over time to the marketplace.

15 A Yes, this is a display. If we look down the left-hand
16 side, we see the Grace product types, the vermiculite-only
17 products, then the next category of vermiculite with chrysotile
18 added, then the category of chrysotile-only products, and then
19 combined post-construction. What the bars going across show is
20 the lifetime of those products in commerce, and what we did
21 with these data was to choose for any one year the maximum
22 concentration that any one in any of the nature of exposure
23 categories could've had to any of these products.

24 In other words, that person had a choice of getting
25 the highest exposure to any one of these products in that year,

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1 and here I have chosen to illustrate that with the max to a D
2 exposure -- category D in 1953 from acoustical plaster. That
3 turned out in 1953 to be the highest exposure for a mean TWA
4 value used over the period of 250 in the year for that person
5 in D exposure category.

6 Q So the analysis that you've just talked about, you get the
7 products out there in use over time. You then figure out the
8 maximum by year. Am I right from what you just said --

9 A Yes.

10 Q -- that this is done not for all categories together but
11 for each category separately?

12 A Correct.

13 Q Okay. Now, what was the next step? After you've done
14 that with the products, what was the next step?

15 A The next step was to incrementally take 45-year rolling
16 blocks of exposure starting in 1920 when the first products
17 appeared and to calculate for each of the A, B, C, and D
18 categories blocks of 45 years of exposure that had three
19 maximums. We maximized in the beginning the mean highest
20 concentration. We allow that person to be exposed to any one
21 of the products in a single year that had the highest
22 concentration for that year, and we maximized that
23 concentration for all days in that year. Then we had the
24 rolling block of 45 years going forward through 2007, and then
25 we chose the highest one of those 45-year blocks to

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1 characterize the exposure to that exposure -- nature of
2 exposure category individual group.

3 Q I'm showing you 2277. Does that chart summarize the data
4 that was used in the application of the parameters that you
5 just described?

6 A Yes, it does. It shows at the top the historical data
7 when the products were on the market. Next it shows an
8 illustration of the 45-year going forward blocks, 1920, 1965,
9 1921, 1966. The last block of years going out in the analysis,
10 1963 to 2007. So we have a cumulative exposure here of 100
11 percent of the time for frequency for every person for 250 days
12 -- occupational days in a year for a 45-year life span to not
13 only the highest mean concentration, but the highest mean
14 concentration to any product in the year.

15 Q I'm showing you 2278. Does this now reflect the inputs to
16 the dose calculation formula that you used? That is which
17 concentrations were selected, which frequency of exposure was
18 selected, and which duration was selected?

19 A Yes, it does. The frequency was set to 100 percent for
20 every day, 250 days per year. I've already discussed the
21 concentration. And the duration was set to an occupational
22 extreme upper bound of 45 years to the highest exposure product
23 for each year within the 45-year block, and then we chose the
24 maximum of the 45-year blocks to characterize the group.

25 Q And now I want to talk about conservatism. That is you

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1 said that you wanted to take a conservative approach. Have you
2 -- do we have a series of slides that go through the different
3 respects in which this approach is conservative?

4 A (No verbal response from the witnesss.)

5 Q You have to respond.

6 A I'm sorry. I didn't hear you.

7 Q I said do you have a series of slides that explain the
8 different respects in which this approach that you took was
9 conservative?

10 A Yes, I do.

11 Q Okay. For purposes of kind of keeping the Court
12 remembering the part of this slide that matters, we have for
13 frequency exposure 100 percent and for duration 45 years,
14 highest exposure product for each year, and the maximum of any
15 45-year period. Those -- that's the -- those are the
16 parameters that you've chosen?

17 A Yes.

18 Q I'm showing you Slide 2279. Could you explain how -- is
19 this one of the slides that relates to the conservatism of your
20 approach?

21 A Yes.

22 Q Could you explain to the Court how this slide relates to
23 the conservatism of your approach?

24 A Yes. In -- on the right-hand side just thinking now of
25 the frequency duration assumption wetted, we have 90,000 hours

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1 for the individual claimants for exposure to Grace products.

2 Q Now, where did that 90,000 come from? This is Category B?

3 A This is Category B, but we used it for everybody.

4 Q Okay.

5 A So we're taking Category B as an illustration and one sub-
6 group of occupational individuals in Category B would be in the
7 custodial maintenance trade. In earlier work we've done using
8 data from the literature we find estimates of the hours that
9 custodial workers actually contact asbestos-containing
10 materials in buildings, and that number is 8,100. And for the
11 same kind of workers coming in contact with VAI attic
12 insulation, we find that number is 692. So in a very careful
13 analysis of how much contact there would actually be, we see
14 that by choosing for screening purposes the 90,000 hours for
15 this particular example, we have been extremely conservative
16 and have set a very high screen.

17 Q Now for the Court's benefit, V refers to vermiculite?

18 A That's right.

19 Q Well, we've referred obviously to Zonolite. So it's ZAI
20 and VAI are the same thing?

21 A Yes.

22 Q Okay. Now, let's turn to Slide 2280, and on 2280, in
23 order to talk about conservatism we've included 100 percent and
24 45 years as the reminders of the approach that you used?

25 A That's right.

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1 Q Could you explain what information you have, if any, as
2 reflected on this chart that reflects the conservatism of those
3 benchmarks? That is 100 percent for 45 years.

4 A Well, yes. Again for the exposure frequency in earlier
5 work we find the building maintenance worker actually is in
6 contact with the ACM material 16 percent of the time, for attic
7 insulation, VAI, Zonolite, 1 percent of the time. And also an
8 analysis we did in one of our early -- one of the earlier
9 analysis I mentioned before, is we found that if we used
10 published data, that the trawled-on and sprayed-on products for
11 those product categories, even if we assumed that all trawled-
12 on/sprayed-on products were Grace products, which they're not,
13 would be in only 20 percent of the buildings.

14 So here all of this cancels out, because we have
15 assumed 100 percent exposure. So every building -- every time
16 one of these maintenance workers goes to a building, it is a
17 building with Grace products, not the 20 percent, and they're
18 not spending 1 percent of the time. They're spending 100
19 percent of the time, eight hours a day, five days a week, in
20 contact with the source of exposure depending on their labor
21 category.

22 Q What about the 45 years? What, if any, comparisons did
23 you do in order to analyze the conservatism of the 45-year
24 parameter?

25 A Yes, I mentioned earlier that EPA's guidance in the

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1 Exposure Factors Handbook is for a maximum of 25 years, and
2 it's interesting when -- and I think we will discuss this
3 later, but when I reviewed -- our team reviewed the information
4 from the PIQs, we found that for those who reported the time
5 periods, the duration, we found that 100 percent were under 50
6 years, 98 percent under 45 years, and interestingly enough, 54
7 percent, the EPA number, under 25 years, and 27 percent under
8 10 years. So this means that there's every indication that
9 we're vastly overestimating and intentionally so, because we
10 set it up as a very conservative screen, the cumulative
11 exposures for individuals in these nature of exposure
12 categories.

13 Q Now, this is for the A and C categories?

14 A That's for A and C.

15 Q And when you say 27 percent under 10 years, was that under
16 10 years of exposure to a Grace product or under 10 years of
17 exposure to all asbestos products?

18 A It was under 10 years of exposure to Grace products.

19 Q Okay. Now, incidentally --

20 A Well --

21 THE COURT: Oh, wait. Pardon me. I'm sorry. I
22 misunderstood. Just a minute until I correct my note, please.

23 (Pause)

24 THE COURT: Okay. Thank you.

25 A I should add that in the review of the questionnaires we

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1 accepted if someone self-identified as an AC, that they were
2 exposed to the Grace product. And so, yes, we are assuming
3 that they're exposed to Grace products in the PIQ review.

4 Q Okay, but do you actually know whether they were exposed
5 to Grace products alone or other products?

6 A No.

7 Q Okay.

8 A No.

9 Q Now, do you have one more slide that related to the
10 conservatism analysis?

11 MR. BERNICK: Could we show the Court 2281?

12 Q Could you explain how this slide relates to conservatism?

13 A Well, first of all, as I've said, we don't give these
14 claimants any time to do anything else but be exposed to Grace
15 products, because this a full working lifetime of 11,250 days,
16 90,000 hours, and yet we know they had other exposures, which I
17 can talk about later.

18 Secondly, we -- if we worked with any non-Grace
19 product or non-exposed to a Grace product, of course, they had
20 no time to have that exposure, because they're -- all of
21 they're exposure time has been consumed. And if they worked
22 less than the 11,250 days, of course, their exposures would
23 decline. And we've seen the less-than hours in an earlier
24 exhibit.

25 Q So put simply, you've assumed 45 years, eight hours a day

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1 exposure to Grace product. If it turns out that they worked
2 with other products, then what effect, if any, would that have
3 on -- what would that tell you about the duration that you've
4 assumed and the dose that results from it?

5 A If they worked with other Grace products, of course,
6 then --

7 Q But not -- of a non --

8 A I mean other non-Grace product. Sorry. In other
9 occupations. Then -- or if they worked in other occupations
10 and had no other exposure, the number of hours would go down,
11 therefore, the cumulative exposure concentrations that have
12 been presented in this analysis would be lessened accordingly.

13 Q On the basis of all the work that was then done with the
14 approaches you've described to the Court, did you, in fact,
15 come up with a maximum cumulative exposure for each of the
16 different categories?

17 A Yes, I did.

18 Q I want to show you Exhibit 2282 and have you explain that
19 to the Court.

20 MR. FINCH: Objection, Your Honor. This data is
21 based on the PCM/PCME conversations. I'm going to object on
22 lack of foundation and hearsay grounds.

23 MR. MULLADY: Join

24 THE COURT: Mr. Bernick.

25 MR. BERNICK: Well, I'll respond to that as follows.

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1 First of all, this witness has testified that she took the mean
2 concentration calculations from Dr. Lees and used those for
3 purposes of her analysis. She has not expressed an opinion
4 that is the same or different from Dr. Lees' opinion. Your
5 Honor resolved that issue in connection with Dr. Lees' opinion
6 and overruled it.

7 So all of the -- for them to come out and say, oh,
8 well, this witness here, who hasn't even expressed an opinion
9 on the matter, is using Dr. Lees' data is now subject to an
10 objection that you previously overruled with respect to Dr.
11 Lees, I don't understand where that comes from. So they can
12 make the objection, but it's already been overruled, and I'm
13 not going to go back over each element of Dr. Lees' analysis
14 with this witness she's relying on. Now, I can bring that out
15 if you'd like.

16 MR. FINCH: Your Honor, I stand on the objection even
17 though the prior objection is overruled. I believe that's in
18 error. To protect my client's interest and their rights, I
19 stand on the objection that any testimony from this witness
20 that is based on Dr. Lees' estimates, which in turn are based
21 on the PCM to PCME conversions, are (a) objectionable, because
22 neither Ms. Anderson nor Dr. Lees with an S has the expertise
23 or the foundation to make those conversions, and secondly that
24 they're hearsay. That's the basis of the objection. I
25 understand the Court has overruled the objection with respect

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1 to Dr. Lees with an S, but I need to preserve the objection
2 with respect to this witness as well.

3 MR. MULLADY: Joined by the FCR.

4 MR. BERNICK: Your Honor, I -- not only did Your
5 Honor overrule it, you overruled it after Dr. Lees with an S
6 testified very specifically about how the conversion was done,
7 and that he not only participated in the conversion, but
8 they're making something sound like a big deal. It's a piece
9 of arithmetic. But be that as it may, if their purpose is to
10 preserve their record as having made the objection, I don't
11 have any problem with that, but --

12 THE COURT: All right. The -- I think the objections
13 have a different purpose. With respect to Dr. Lees, Dr. Lees
14 testified that he participated in designing what the conversion
15 was about and for, and I think the objection is different with
16 respect to that. The objection as to this witness using that
17 data I think is objectionable for a different reason. But I
18 think at this point in time the objection's also going to be
19 overruled.

20 I'm going to take a look at all of this when I get
21 all of the evidence into the case and analyze at that point in
22 time how it all goes. But nonetheless, for now we're going to
23 finish this trial with all the witnesses here, so that in the
24 event that I do at some point have to reconsider any of this,
25 I've at least got the evidence on the record.

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1 So that you understand, I do not believe that I'm
2 going to reverse this decision when I see all the evidence, but
3 nonetheless, for now it's overruled. And in the event that I
4 think I'm wrong when I do have all the evidence, I will on my
5 own reconsider whether it's appropriate. So it's overruled.

6 MR. BERNICK: Let me just ask, so that I'm sure that
7 my record is also good down the road.

8 BY MR. BERNICK:

9 Q Dr. Anderson, tell us whether or not you relied upon the
10 concentrations determined -- the concentration calculations
11 determined by Dr. Lees.

12 A Yes, I relied on the concentration values that he
13 provided, and, in fact, one can't really proceed with a risk
14 assessment in any other way. If we look at the guidance that's
15 in the IRIS database at EPA, it cautions against not making
16 corrections. So while I wouldn't make them myself, I don't
17 proceed with an asbestos-type risk assessment, unless this
18 factor has been taken into account by someone qualified to do
19 that work.

20 Q Is it customary for you in your field of expertise of risk
21 assessment to -- strike that. Is the kind of information --
22 the information that you got from Dr. Lees regarding
23 concentration calculations including the adjustment for PCM and
24 PCME, is that the kind of information that is reliable --
25 considered to be reliable by people like yourself in the field

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- 1 of risk assessment?
- 2 A Yes, it is.
- 3 Q Okay, and in Dr. Lees' case do you have any issue in your
- 4 mind whatsoever concerning the qualifications and expertise of
- 5 Dr. Lees to perform the mean concentration determinations?
- 6 A No.
- 7 Q Do you have any issue about the propriety of his decision
- 8 to in turn rely upon a person who is expert in materials fiber
- 9 analysis who actually go look in the microscope once, go look
- 10 in the microscope twice to make the calculation?
- 11 A This is routine -- routinely done in the world of risk
- 12 assessment for asbestos.
- 13 Q Now I'd like to turn to Exhibit 2282 and have you explain
- 14 to the Court what it is that Exhibit 2282 reflects.
- 15 A These are the resulting screening values that we have been
- 16 speaking of presented here for screening purposes for each of
- 17 the nature of exposure categories, with emphasis on the fact
- 18 that they are very high screens, meaning very, very
- 19 conservative screens, and at the bottom of this slide there's
- 20 the repetition of the frequency and duration assumptions.
- 21 Q Let me just ask does Exhibit 2282 accurately summarize the
- 22 data that you have generated regarding the cumulative doses for
- 23 each of the categories there displayed, A through --
- 24 A Yes, it does.
- 25 Q Does this then bring us to the conclusion of the work on

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1 your risk assessment up through dose?

2 A Yes.

3 Q Okay, and do we now see in Exhibit 2296 a summary of the
4 work that has taken place that brings you to the different
5 doses that we have as displayed under the first column?

6 A Yes, it does.

7 MR. BERNICK: Now, Your Honor, I have I think
8 probably about 15 minutes left in the direct examination. I
9 can complete it, or if Your Honor would feel more comfortable
10 taking the morning break, either way is fine.

11 THE COURT: Isn't it only 11:00?

12 MR. BERNICK: Yes.

13 THE COURT: You want to take a recess?

14 MR. BERNICK: I don't want to take a recess. I'm
15 prepared to go -- take it to the end, but I just --

16 THE COURT: I think -- why don't you finish, and then
17 we'll take a short recess and let the -- we'll take a recess
18 before cross.

19 MR. BERNICK: Okay. Fine.

20 BY MR. BERNICK:

21 Q What is the next step in the analysis -- the risk
22 assessment analysis?

23 A Well, of course, it's the risk characterization question
24 of what do these mean. Do these -- what do these mean in terms
25 of the nature of exposure categories of claimants as far as